

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please cancel claims 24, 25 and 41-50 without prejudice.

Listing of Claims:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)

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17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Previously Presented) A thin-film transistor, comprising:
 - a source electrode;
 - a drain electrode;
 - a gate electrode;
 - a dielectric insulator; and
 - a deposited thin-film semiconductive channel,

where the electrodes, dielectric insulator and semiconductive channel are disposed so that the dielectric insulator insulates the gate electrode from the semiconductive channel and from the source electrode and drain electrode and where the semiconductive channel includes a first portion and a second portion, the first portion being doped differently than the second portion so as to achieve a desired variation in a gate threshold voltage required to turn on the thin-film transistor,

where the first portion of the semiconductive channel is positioned adjacent to the dielectric insulator and is closer to the dielectric insulator than the second portion, and

where the first portion of the semiconductive channel is doped with a donor-type impurity to increase positive fixed electrical charge density within the first portion relative to the second portion and thereby produce a negative shift in the gate threshold voltage.

27. (Original) The thin-film transistor of claim 26, where the semiconductive channel is fabricated from zinc oxide and where the donor-type impurity includes aluminum.

28. (Previously Presented) A thin-film transistor, comprising:

a source electrode;

a drain electrode;

a gate electrode;

a dielectric insulator; and

a deposited thin-film semiconductive channel,

where the electrodes, dielectric insulator and semiconductive channel are disposed so that the dielectric insulator insulates the gate electrode from the semiconductive channel and from the source electrode and drain electrode and where the semiconductive channel includes a first portion and a second portion, the first portion being doped differently than the second portion so as to achieve a desired variation in a gate threshold voltage required to turn on the thin-film transistor,

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where the first portion of the semiconductive channel is positioned adjacent to the dielectric insulator and is closer to the dielectric insulator than the second portion, and

where the first portion of the semiconductive channel is doped with an acceptor-type impurity to increase negative fixed electrical charge density within the first portion relative to the second portion and thereby produce a positive shift in the gate threshold voltage.

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

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- 44. (Cancelled)
- 45. (Cancelled)
- 46. (Cancelled)
- 47. (Cancelled)
- 48. (Cancelled)
- 49. (Cancelled)
- 50. (Cancelled)

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